

Docket No.: NEB-180

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: W.E. Jack, et al. EXAMINER:

SERIAL NO.: GROUP:

FILED:

FOR: Use of Site-Specific Nicking Endonucleases To  
Create Single-Stranded Regions And  
Applications Thereof

Hon. Commissioner of Patents  
and Trademarks

Sir:

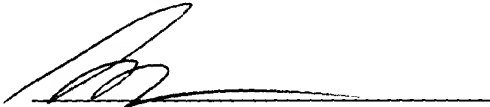
**STATEMENTS IN SUPPORT OF FILING  
AND SUBMISSIONS IN ACCORDANCE WITH 37 C.F.R.  
§§1.821.1-1.825**

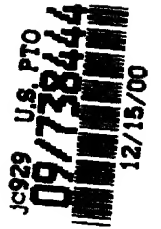
In accordance with 37 C.F.R. §§1.821-1.825, I hereby state that the contents of the paper and computer-readable copies of the sequence listing submitted in accordance with 37 C.F.R. §1.821(c) and (e), respectively, are the same. I hereby state that the submission, filed in accordance with 37 C.F.R. §1.821(g) does not introduce new matter.

Respectfully submitted,

NEW ENGLAND BIOLABS, INC.

Date: 11/25/00

  
Gregory D. Williams  
(Reg. No.: 30901)  
Attorney for Applicant  
32 Tozer Road  
Beverly, MA 01915



SCANNED, #

# SEQUENCE LISTING

<110> Jack, William E.  
Schildkraut, Ira  
Menin, Julie F.  
Greenough, Lucia

<120> Use of Site-Specific Nicking Endonucleases to Create  
Single-Stranded Regions And Applications Thereof

<130> NEB-180

<140>

<141>

<160> 51

<170> PatentIn Ver. 2.0

<210> 1

<211> 40

<212> DNA

<213> Synthetic oligonucleotide

<400> 1

aaatcaatct aaagtatata ccggtaaact tggctctgaca

40

<210> 2

<211> 38

<212> DNA

<213> synthetic oligonucleotide

<400> 2

ctagcattag tcagactcta cattcaaata tgtatccg

38

<210> 3

<211> 38

<212> DNA

<213> synthetic oligonucleotide

<400> 3

gcgctcgatg tcagactcga gcaaaaggcc agcaaaag

38

<210> 4

<211> 56

<212> DNA

<213> synthetic oligonucleotide

<400> 4  
gagtccgatt gacctaagcg gatactctga cgactcgtag aaaagatcaa aggatc 56

<210> 5  
<211> 51  
<212> DNA  
<213> synthetic oligonucleotide

<400> 5  
gagtctcaga ctatctggag cgactgactc aaacttggtc tgacagttac c 51

<210> 6  
<211> 40  
<212> DNA  
<213> synthetic oligonucleotide

<400> 6  
gtaaatatcg gactctacaa tcaaatatgt atccgctcat 40

<210> 7  
<211> 82  
<212> DNA  
<213> synthetic oligonucleotide

<400> 7  
gatcgagtct gacatcgagc gcttagcatt agtcagactc gatatcgagt ctgagcctgt 60  
tagcgatggg acatgacgac tc 82

<210> 8  
<211> 82  
<212> DNA  
<213> synthetic oligonucleotide

<400> 8  
ctaggagtcg tcatgtacca tcgctaacag gctgagactc gatatcgagt ctgactaatg 60  
ctaggcgctc gatgtcagac tc 82

<210> 9  
<211> 22  
<212> DNA  
<213> synthetic oligonucleotide

<400> 9  
catgtctaga ctgcagagat ct 22

<210> 10  
<211> 18  
<212> DNA

<213> synthetic oligonucleotide

<400> 10

agatctctgc agtctaga

18

<210> 11

<211> 21

<212> DNA

<213> synthetic oligonucleotide

<400> 11

tacattcaaa tatgtatccg c

21

<210> 12

<211> 21

<212> DNA

<213> synthetic oligonucleotide

<400> 12

taaacttggt ctgacagtta c

21

<210> 13

<211> 54

<212> DNA

<213> synthetic oligonucleotide

<400> 13

gagtatccgc ttaggtcaat cggactcgga ccggatatca catgtgagtc gtca

54

<210> 14

<211> 54

<212> DNA

<213> synthetic oligonucleotide

<400> 14

cctgttagcg atggtacatg acgactcaca tgtgatatcc ggtccgagtc cgat

54

<210> 15

<211> 10

<212> DNA

<213> N.BstNBI Recognition Sequence

<220>

<223> N indicates any base (subject to the normal rules  
of base pairing between the strands).

<400> 15

gagtcnnnnn

10

<210> 16  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 16  
gcgtctaaac ccagatgt

18

<210> 17  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 17  
gcgttcaaac ccagatgt

18

<210> 18  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 18  
agctgttcta agccgcaa

18

<210> 19  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 19  
tgtgaacacc tcgtaacg

18

<210> 20  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 20  
ttcccaagca catgggat 18

<210> 21  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 21  
tctccaagca cagtgagt 18

<210> 22  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 22  
tgactcaagc gagtactc 18

<210> 23  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 23  
tgactcaagc ggatactc 18

<210> 24  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequences - all randomly generated

<400> 24  
tgcacgaagc ggatactc

18

<210> 25  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 25  
actgagcgcc atgcatta

18

<210> 26  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 26  
actgagcgcc agtcatta

18

<210> 27  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 27  
atcgagcgcc atgcatta

18

<210> 28  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 28  
atcgagcgcc tagcatta

18

<210> 29  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 29  
tgtaccatcg ctaacagg

18

<210> 30  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence - implemented via the synthetic  
oligonucleotide, but never existed as independent  
entity

<400> 30  
gagtctgaca tcgagcgcct agcattagtc agactc

36

<210> 31  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence - implemented via the synthetic  
oligonucleotide, but never existed as independent



entity.

<400> 31  
gagtccgatt gacctaagcg gatactctga cgactc 36

<210> 32  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence - implemented via the synthetic  
oligonucleotide, but never existed as independent  
entity

<400> 32  
gagtctcagc ctggttagcga tggtagatga cgactc 36

<210> 33  
<211> 50  
<212> DNA  
<213> synthetic oligonucleotide

<220>  
<223> N/A

<400> 33  
gagtcagctc aatgttgcca gtcaggactc gtagaaaaga tcaaaggatc 50

<210> 34  
<211> 35  
<212> DNA  
<213> synthetic oligonucleotide

<220>  
<223> N/A

<400> 34  
gggccacgta gactcgagca aaaggccagc aaaag 35

<210> 35  
<211> 12  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical

sequence - randomly generated

<400> 35

gtagttacgc ca

12

<210> 36

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 36

caatggtgcc ag

12

<210> 37

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 37

tctcaatgag gc

12

<210> 38

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 38

agcgagcctt ta

12

<210> 39

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical

sequence - randomly generated

<400> 39

tgatcgagac ct

12

<210> 40

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 40

tctgcggata ac

12

<210> 41

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 41

tatgcagcgc at

12

<210> 42

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 42

gatcgaacgt tc

12

<210> 43

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical

sequence - randomly generated

<400> 43

aaatttgggc cc

12

<210> 44

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 44

actatctgga gc

12

<210> 45

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 45

aggcgacatt tc

12

<210> 46

<211> 12

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Theoretical  
sequence - randomly generated

<400> 46

atttacgggc ca

12

<210> 47

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Theoretical

sequence - implemented via the synthetic  
oligonucleotide, but never existed as independent  
entity.

<400> 47  
gagtcagctc aatgttgcca gtcaggactc 30

<210> 48  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Theoretical  
sequence -implemented via the synthetic  
oligonucleotide, but never existed as independent  
entity.

<400> 48  
gagtcagata tttagcgggcc acgtagactc 30

<210> 49  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Theoretical  
sequence - implemented via the synthetic  
oligonucleotide, but never existed as independent  
entity.

<400> 49  
gagtcacaga ctatctggag cgactgactc 30

<210> 50  
<211> 48  
<212> DNA  
<213> synthetic oligonucleotide

<220>  
<223> Description of Artificial Sequence:N/A

<400> 50  
ctggcaacat tgatcggact cggaccggat atcacatgtg agtcgtca 48

<210> 51  
<211> 48

<212> DNA

<213> synthetic oligonucleotide

<220>

<223> Description of Artificial Sequence:N/A

<400> 51

gctccagata gttgacgact cacatgtgat atccggtccg agtccgat

48